



US006452605B1

(12) **United States Patent**
Kawashima

(10) **Patent No.:** **US 6,452,605 B1**
(45) **Date of Patent:** **Sep. 17, 2002**

(54) **METHOD, APPARATUS, AND RECORDING MEDIUM FOR MODIFYING A VIEW IN CAD**

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(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

5,699,535 A * 12/1997 Amro
5,760,772 A * 6/1998 Austin
5,956,032 A * 9/1999 Argiolas
6,141,008 A * 10/2000 Bloomfield
6,166,736 A * 12/2000 Hugh

FOREIGN PATENT DOCUMENTS

JP 2-77832 3/1990
JP 9-101863 4/1997

* cited by examiner

(21) **Appl. No.:** 09/225,326

(22) **Filed:** Jan. 5, 1999

(30) **Foreign Application Priority Data**

Jul. 27, 1998 (JP) 10-211157

(51) **Int. Cl.⁷** G09G 5/00; G09F 3/14

(52) **U.S. Cl.** 345/661

(58) **Field of Search** 345/661, 664,
345/665, 676, 679, 680, 790, 792, 798,
800

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,487,143 A * 1/1996 Southgate

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(57) **ABSTRACT**

A computer-aided design apparatus improves operability in CAD and includes a view function which automatically enlarges a view frame or automatically modifies the display scale factor if a drawing element that exceeds the view frame is input. The computer-aided design apparatus performs design work by setting a plurality of views of different origins and coordinate systems on a screen.

11 Claims, 12 Drawing Sheets

